

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of claims:

1-8 (canceled)

9. (New) A continuously variable magnetodynamic transmission comprising:

an input rotor (7) driven by a power source and provided with magnets (6) and pole shoes (10) that are evenly distributed along its circumference, said input rotor (7) producing during its rotation a multi-polar magnetic field revolving with it;

a coaxial field concentrator (4) comprising magnetically conductive pole shoes; and

a coaxial stator (2) having grooves (5) and windings in said grooves, said windings being sequentially short-circuited during operation,

wherein: said input rotor is surrounded radially outwardly by said coaxial field concentrator and is separated from said coaxial field concentrator by a primary air gap (13); said coaxial field concentrator is surrounded radially outwardly by said coaxial stator and is separated from said coaxial stator by a secondary air gap (12); and said coaxial field concentrator is rotatable relative to said coaxial stator.

10. (New) A transmission according to claim 9, characterized in that the windings of the stator (2) are sequentially short-circuitable in groups, and the number of groups of windings that are switched together corresponds to the number of pole shoes (10) of the input rotor (7).

11. (New) A transmission according to claim 10, characterized in that the number of poles of the input rotor (7) and the coaxial stator (2) differs by 2.

12. (New) A transmission according to claim 11, characterized in that the number of poles of the input rotor (7) is 22 poles and that of the coaxial stator (2) is 24 poles.

13. (New) A transmission according to claim 9, characterized in that the field concentrator (4) is implemented in the form of a pole wheel and the individual pole shoes consist of radially oriented permanent magnets (6) between which, evenly distributed along the circumference, a magnetically conductive material is disposed.

14. (New) A transmission according to claim 9, characterized in that a control of the sequential switching of the short-circuited conductor loops takes place in the stator (2) according to the equation

$$T = 360/6 + tn^{\circ}$$

and that said transmission further comprises a modular adjuster having, per branch, 4 transistors in H-circuit arrangement and a hall sensor that detects the spatial position of the coil branch relative to the field concentrator poles.

15. (New) A method for operation of the magnetodynamic transmission according to claim 14, characterized in that the stator grooves carry six windings and the transmission operates using at least one or more of the following operating modes:

a "neutral" mode in which all conductor loops are continuously short-circuited so that in this mode a torque-free position is reached independently from other conditions; and

a "drive" mode, in which three of the six windings are short-circuited, the selection of which windings are short-circuited determines the driving direction, and a shifting of the On and Off.

16. (New) A method according to claim 15, characterized in that the power source is an input motor and the adjuster, with the input motor running, is synchronized with its frequency, and energy is thus added or removed in this manner at equal-phase or opposed phase voltage in the winding.

17. (New) A method for operation of a magnetodynamic transmission according to claim 15, characterized in that the transmission operates using at least one or more of the further operating modes:

a "sum" mode in which the activated windings are actuated with a PWM signal in such a way that the winding current can be raised to implement the "starter" and "booster" functions; and

a "difference" mode in which the activated windings are actuated with a PWM signal in such a way that the winding current can be lowered to implement the "generator" functions for a vehicle electrical system, or "regenerative braking" functions.

18. (New) A method according to claim 17, characterized in that the power source is an input motor and the adjuster, with the input motor running, is synchronized with its frequency, and energy is thus added or removed in this manner at equal-phase or opposed phase voltage in the winding.

19. (New) A method according to claim 16, characterized in that the power source is an input motor and the adjuster, with the input motor running, is synchronized with its frequency,

and energy is thus added or removed in this manner at equal-phase or opposed phase voltage in the winding.

20. (New) A transmission according to claim 9, characterized in that the number of poles of the input rotor (7) and the coaxial stator (2) differs by 2.

21. (New) A transmission according to claim 9, characterized in that the current induced in the short-circuited windings is utilized to charge a battery, the transmission thus functioning as a generator.

22. (New) A transmission according to claim 9, characterized in that the number of poles of the input rotor (7) and the coaxial stator (2) differs by 2.

23. (New) A transmission according to claim 22, characterized in that the number of poles of the input rotor (7) is 22 poles and that of the coaxial stator (2) is 24 poles.

24. (New) A transmission according to claim 9, wherein said magnets of said input rotor are permanent magnets.